PROJECT RISK CATEGORIES

Introduction

All projects start off with a bang. Yet, some are destined for failure from its very inception, whilst others collapse later on.

Yet, others reach the finish line triumphantly, carrying with them a few scars from battles faced and overcome.

Therefore, in order to minimize project failure, it is prudent to identify the main causative factors that contribute to project risk.

The three main constraints on projects can be classified as schedule, scope and resources, and the mishandling of each can cause a ripple effect on the project, which would then face imminent collapse.

Scope Risk

Defining what is required is not always easy. However, so as to ensure that scope risk is minimized, the deliverables, the objectives, the project charter, and of course, the scope needs to be clearly defined.

All scope risks, be they quantifiable or not, needs to recognized. Scope creep, hardware defects, software defects, an insufficiently defined scope, unexpected changes in the legal or regulatory framework and integration defects can all be classified under the broad umbrella of scope risk.

There are a variety of methods that help stakeholders identify the scope of the project. The risk framework analyses the project's dependency on technology and the market and then assesses how changes in each would affect the outcome of the project.

Similarly, the risk complexity index looks at the technical aspects of the projects, which can be easily quantified and allocated a number between 0 and 99 to indicate the risk of the project.

Risk assessment, on the other hand, uses a grid of technology, structure and magnitude to assess the proposed risk of the project.

A work breakdown structure, commonly abbreviated as WBS, also considers the risks of projects, which are ill defined and where the stated objectives are ambiguous.

Scope risks can be minimized and managed with savvy planning. Defining the project clearly, managing the changes in scope throughout the duration of the project, making use of risk registers to better manage risks, identifying the causative factors, and the appropriate responses to risky situations and developing greater risk tolerance in collaboration with the customer, would pay great dividends in the long run.

Schedule Risk

Keeping to timelines and agreed critical paths is one of the most difficult situations that project managers now face.

An extensive reliance on external parties whose output is not within the project's scope of control, estimation errors, which most often are too optimistic, hardware delays and putting off decision making, all tend to delay the project at hand.

To minimize schedule risks, there are a few time-tested methods that can be put to good use. The process flow of the project should be broken down into small, clearly defined components where the allocated timeframe for each process is relatively short in duration *thismakesiteasytoidentifythingswhentasksveeroffschedule, atitsearliest*.

Be wary of team members or external parties, who hesitate to give estimates or whose estimates seem unrealistic based on historical data and previous experience.

When formulating the critical path, ensure that any holidays that arise are in-built into the equation, so that realistic expectations are created, right from inception. Defining re-work loops too is also recommended, wherever possible.

Resource Risk

People and funds are any project's main resource base. If the people are unskilled or incompetent to perform the task at hand, if the project is under-staffed from the beginning, or if key project members come on aboard far after the inception of the project, there is an obvious project risk that has ill-planned human resources as its base.

Similarly, from a financial perspective, if insufficient funds are provided to carry out the necessary tasks, be it relevant training programs for the people in question or be it inadequate investments in technology or required machinery, the project is doomed to fail from inception.

Estimating project costs accurately, allocating a suitable budget to meet these costs, not placing undue expectations on the capacity of the staff in question and avoiding burn-out at a later date are all factors that help minimize the project resource risk.

Outsourced functions merit even more attention to detail, as it is for the most part, it is away from the direct purview of the project manager. Clearly defined contracts and regular monitoring would lessen this risk substantially.

Conflict management, which too generally arises with the progression of a project, should also be handled in a skilful manner, so that the project has a smooth run throughout its entire duration.

Conclusion

As is readily apparent, all projects do run the risk of failure due to unplanned contingencies and inaccurate estimates.

Yet, careful planning, constraint management, successful recovery from mistakes if and when they do arise will minimize most risks. True, luck too, does play a part in the success of a project, but hard work and savvy management practices will override most such difficulties.